

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-9. (Canceled)
10. (Currently Amended) A method for producing a single crystal by Czochralski method by pulling a seed crystal from a raw material melt, comprising:

immersing the seed crystal into the raw material melt; and  
growing the single crystal by rotating and pulling the seed crystal,

wherein:

the single crystal is pulled while controlling a value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) within a range of values of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ); and

the range of values of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ), including a defect region and/or a defect-free region, is controlled according to  $T_{\text{max}}$  ( $^{\circ}\text{C}$ );

wherein:

$V(\text{mm}/\text{min})$  is a single crystal pulling rate of pulling the single crystal;

$G$  ( $\text{K}/\text{mm}$ ) is a temperature gradient at a solid-liquid interface, in a range of a melting point of the raw material and  $1400^{\circ}\text{C}$ ;

$T_{\text{max}}$  ( $^{\circ}\text{C}$ ) is a highest temperature of the raw material melt at an interface between a quartz crucible inner wall and the raw material melt; and

the range of values of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) is ~~selected from the group~~ consisting of:

(A) from  $-0.000724 [\text{mm}^2/(^{\circ}\text{C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (^{\circ}\text{C}) + 1.31$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) to less than  $-0.000724 [\text{mm}^2/(^{\circ}\text{C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (^{\circ}\text{C}) + 1.38$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ); or

$$(B) -0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.38$$

( $\text{mm}^2/\text{K} \cdot \text{min}$ ) or more; ~~and~~ or

$$(C) \text{ from } -0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.31$$

( $\text{mm}^2/\text{K} \cdot \text{min}$ ) to  $-0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.35 (\text{mm}^2/\text{K} \cdot \text{min})$ .

11-13. (Canceled)

14. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with the  $T_{\text{max}} (\text{°C})$  being in a range of 1560 °C or less.

15-17. (Canceled)

18. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein, at least, the  $T_{\text{max}} (\text{°C})$  is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

19-21. (Canceled)

22. (Previously Presented) The method for producing a single crystal according to Claim 14, wherein, at least, the  $T_{\text{max}} (\text{°C})$  is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

23-25. (Canceled)

26. (Previously Presented) The method of producing a single crystal according to Claim 10, wherein the single crystal that is pulled is a silicon single crystal.

27. (Previously Presented) The method of producing a single crystal according to Claim 10, wherein the single crystal that is pulled has a diameter of 200mm or more.

28. (Canceled)